

DE-A 199 06 978, respectively WO 00/48582, describes medicaments based on deoxypeganine for the therapy of drug addiction and drug dependence.

DE-A 199 06 979, respectively WO 00/48445, describes medicaments based on deoxypeganine for the therapy of nicotine dependence.

DE-A 199 06 975, respectively WO 00/48599, describes the use of deoxypeganine for the therapy of Alzheimer's dementia.

DE-A 101 63 667, respectively WO 03/053445 discloses the use of deoxypeganine for treating clinical depression.

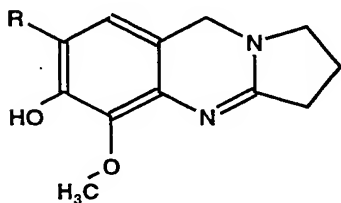
Based on its pharmacological properties, deoxypeganine is included in the group of reversibly acting cholinesterase inhibitors. The fact that deoxypeganine does not only inhibit acetylcholinesterase but also monoamine oxidases, is in general terms known from the above-indicated publications. The monoamine oxidase-inhibiting action of deoxypeganine is in all of these documents described as a merely complementary action which is intended to reinforce the acetylcholinesterase-inhibiting action of deoxypeganine, the latter inhibition being regarded as most important.

Because of its double mechanism of action, deoxypeganine is said to be intended preferably for use in the treatment of a schizophrenic psychosis, or for use in the manufacture of a medicament for treating a schizophrenic psychosis that is connected with increased monoaminoxidase activity and/or decreased functionality (decreased activity or decreased expression) of nicotinic acetylcholine receptors, especially of the alpha 7 subtype.

transdermal therapeutic systems (active agent plasters) as described specifically for deoxypeganine in DE-A 199 06 977. These enable the delivery of the agent in a controlled manner over a prolonged period via the skin to the patient being treated.

According to the invention, deoxypeganine can be used both in the form of its free base and as acid addition salt for treatment; preferred salts are deoxypeganine hydrochloride and deoxypeganine hydrobromide. In addition, it is also possible to use salts of other pharmacologically acceptable acids, e.g. citrate, tartrate or acetate.

In place of deoxypeganine, its derivatives described in the literature are also to be understood in a similar way as long as they are simultaneously inhibitors of acetylcholinesterase and of monoamine oxidases. These include the 7-bromodeoxypeganine described in *Synthetic Commun.* 25(4), 569-572 (1995), as well as the 7-halo-6-hydroxy-5-methoxydeoxypeganines which are described in *Drug Des. Disc.* 14, 1-14 (1996) and have the general formula



R= Br, Cl, F or I

7-Bromo-6-hydroxy-5-methoxydeoxypeganine
 7-Chloro-6-hydroxy-5-methoxydeoxypeganine
 7-Fluoro-6-hydroxy-5-methoxydeoxypeganine
 7-Iodo-6-hydroxy-5-methoxydeoxypeganine

The deoxypeganine derivatives described in *Ind. J. Chem.* 24B, 789-790 (1985) can also furthermore be used, namely

Amended Claims

1. Use of deoxypeganine, in the form of a free base or in the form of an acid addition salt, or of a derivative of deoxypeganine as long as said derivative is simultaneously inhibitor of acetylcholinesterase and of monoamine oxidase, for producing a medicament for treating a schizophrenic psychosis which is connected with increased monoamine oxidase activity and/or decreased functionality (decreased activity or decreased expression) of nicotinic acetylcholine receptors.
2. Use according to claim 1, characterized in that the medicament contains the active substance deoxypeganine in proportions of 0.1 to 90%-wt, preferably 2 to 20%-wt, calculated as free deoxypeganine.
3. Use according to claim 1 or 2, characterized in that said medicament has a depot effect.
4. Use according to any one of the preceding claims, characterized in that said medicament is a medicament that can be administered orally.
5. Use according to any one of claims 1 to 3, characterized in that said medicament is a medicament that can be administered parenterally.
6. Use according to claim 5, characterized in that said medicament is a medicament that can be administered transdermally.
7. Use of deoxypeganine, in the form of a free base or in the form of an acid addition salt, or of a derivative of deoxypeganine as long as said derivative is simultaneously inhibitor of acetylcholinesterase and of monoamine oxidase, for treating a schizophrenic psychosis which is connected with increased monoamine oxidase activity and/or decreased functionality (decreased activity or decreased expression) of nicotinic acetylcholine receptors.

8. Use according to claim 7, characterized in that the administered daily dose is in the range 0.1 to 100 mg, preferably 10 to 50 mg.

9. Use according to claim 7 or 8, characterized in that deoxypeganine is administered in a pharmaceutical preparation containing the active substance in proportions of 0.1 to 90%-wt, preferably 2 to 20%-wt, calculated as free deoxypeganine.

10. Use according to claim 9, characterized in that deoxypeganine is administered in a pharmaceutical preparation having depot effect.

11. Use according to claim 9 or 10, characterized in that deoxypeganine is administered orally.

12. Use according to claim 9 or 10, characterized in that deoxypeganine is administered parenterally.

13. Use according to claim 12, characterized in that deoxypeganine is administered transdermally.

14. Use according to any one of the preceding claims, characterized in that the said nicotinic acetylcholine receptors are nicotinic acetylcholine receptors of the alpha 7 subtype.

15. Use according to any one of the preceding claims, characterized in that the said derivative of deoxypeganine, as long as it is simultaneously inhibitor of acetylcholinesterase and of monoamine oxidase, is selected from the group consisting of 7-bromodeoxypeganine, 7-bromo-6-hydroxy-5-methoxydeoxypeganine, 7-chloro-6-hydroxy-5-methoxydeoxypeganine, 7-fluoro-6-hydroxy-5-methoxydeoxypeganine, 7-iodo-6-hydroxy-5-methoxydeoxypeganine, 1,2,3,9-tetrahydro-6,7-methylenedioxypyrrolo[2,1-b]chinazoline and 2,3-dihydro-6,7-dimethoxypyrrolo[2,1-b]quinazoline-9(1H)-on.